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EXAMINER	
HOEL, MATTHEW D	
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3714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/657,650	Applicant(s) PACEY ET AL.	
	Examiner Matthew D. Hoel	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 2, 5, 7, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciano, et al. (U.S. patent 6,050,895 A) in view of Oshima (U.S. patent 6,045,446 A) and Lipson (U.S. patent 5,435,554 A).

3. As to Claim 1: Luciano in '895 discloses all of the elements of Claim 1, but lacks specificity as to processing physical object data and simulation rule data, and realistically depicting gaming activity on a display. Luciano in '895 teaches a gaming machine (Fig. 1A) with means for accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). '895 has a display (104, Fig. 1A). '895 has a means for cashing out the payoff based on a winning condition of the gaming activity (3, Fig. 3; Col. 10, Line 67 to Col. 11, Line 1). The game of '895 has a central controller 512 (Fig. 5; Col. 11, Lines 42 to 46). '895 has interaction guidelines associated with a winning condition (in coordination/dexterity game, phaser is fired and evaluated if successful or not, Steps 316, 318a, 322, and 324, Fig. 3; alternatively, for '895's game of chance, a paytable for the game of chance is chosen based on the player's level of skill in the coordination/dexterity game, the potential rewards are greater, but the odds are the same, Steps 326, 328, 332, game of chance displayed 334, game of chance evaluated using standard paytables 336, and 337, Fig. 3, Col. 10, especially lines 1 to

24; games of chance can be poker or blackjack, which are known to have winning outcomes drawn from a deck of cards (finite set of indicia), Col. 6, Lines 51 to 64). The central processor in '895 randomly selects a winning game outcome from a plurality of game outcomes in response to receiving the wager, the plurality of game outcomes including the winning condition (Steps 326, 328, 332, game of chance displayed 334, game of chance evaluated using standard paytables 336, and 337, Fig. 3, Col. 10, especially lines 1 to 24; games of chance can be poker or blackjack, which are known to have winning outcomes drawn from a deck of cards (finite set of indicia), Col. 6, Lines 51 to 64). Oshima, however, in '446 teaches physical object data, simulation rule data, and producing a realistic depiction of gaming activity on a display. '446 has physical object data (coordinates, Figs. 3A-C and 4A-H). '446 also has simulation rule data (calculating means, result information setting means, decision means, graphic command issuing means, variable setting means, linear and angular displacement acquiring means, and polygon information managing means, Fig. 2). '446 has a realistic depiction of gaming activity on the display (hammer-throwing field athlete, Figs. 5A-D). It would be obvious to one of ordinary skill in the art to apply the realistic depiction, physical object data, and simulation rule data of '446 to '895. The hammer-throwing game of '446 is a game of skill. '446 controls the throwing body (athlete) in response to commands from manual operation of the controller and controls the object to be hurled (hammer) in response to commands from manual operation of the controller (Col. 3, Lines 17 to 22). The game of '895 is a hybrid game, at least one part of which involves hand-eye coordination and dexterity (Col. 2, Lines 5 to 15), like the

hammer-throwing game of '446. The joystick (118, Fig. 1A) of '895 would be appropriate for controlling the game of '446. The coordination/dexterity portion of '895 can be a sports game (Col. 5, Lines 28 to 31). The advantage of this combination would be to provide a sports-oriented coordination game with a familiar theme such as hammer throwing to stimulate players' interest in playing the gaming machine. '554, however, teaches simulation rule data including performance tendencies of a physical object, namely performance tendencies of a batter and a pitcher based on past performance. Step 418 of Fig. 7 calculates an altitude error of a hit ball in a baseball game based on the player's skill (Col. 16, Lines 7 to 21). Step 332 of Fig. 6c calculates hit/miss values based in part on the quality of the pitch and the skill of the batter (Col. 15, Lines 47 to 58). It would be obvious to one of ordinary skill in the art to apply the performance tendencies of '554 to the combination of '895 and '446. The skill game of '895 can be a sports game requiring some sort of aiming decision (Col. 5, Lines 28 to 31), exactly like the baseball game of '554, which require skill in pitching or batting. '446 also lends itself to this combination as the main embodiment described is a hammer-throwing game, which is analogous to the pitching of the baseball game of '554. The hammer-throwing game is a game of skill; the throwing is based on the timing of the player (Col. 2, Lines 23 to 35). An altitude error for the thrown hammer similar to that of the batted ball of '554 ('554, Step 418, Fig. 7) could be applied. The advantage of this combination would be to make the game more realistic by introducing a range of error based on the player's past performance. This would reflect the player's skill or

lack thereof, providing a means for the player to monitor his or her progress and an incentive to practice.

4. As to Claim 2: '446 has a 3-D processor (10, Fig. 1) interacting with the central processor (1, Fig. 1) to facilitate the production of real-world gaming activity on the display (Figs. 5A-D).

5. As to Claim 7: The gaming activity of '446 is a sport (track and field), and the physical object data refers to a participant in a hammer-throwing event (Figs. 5A-D).

6. As to Claim 15: Luciano in '895 teaches a gaming machine (Fig. 1A) with means for accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). '446 simultaneously simulates and displays in real time an interaction of simulated physical objects using representations of three-dimensional forms (Figs. 5A-D). '895 teaches evaluating if an outcome meets winning conditions and awarding a payoff if the outcome meets the winning conditions (334, 336, 337, and 338, Fig. 3). '554 teaches simulation rule data including performance tendencies of a physical object, namely performance tendencies of a batter and a pitcher based on past performance. Step 418 of Fig. 7 calculates an altitude error of a hit ball in a baseball game based on the player's skill (Col. 16, Lines 7 to 21). Step 332 of Fig. 6c calculates hit/miss values based in part on the quality of the pitch and the skill of the batter (Col. 15, Lines 47 to 58). The interaction of the physical objects in '554 includes the performance tendencies as the altitude error of the batted ball is determined in part from the batters ability (Step 418, Fig. 7).

7. Claims 3 to 6, 8 to 14, and 16 to 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciano ('895), Oshima ('446), and Lipson ('554) in view of French, et al. (U.S. patent 6,308,565 B1).

8. As to Claim 3: The combination of Luciano ('895), Oshima ('446), and Lipson ('554) discloses all of the elements of Claim 3, but lacks specificity as to the physical object data including mass and dimensions of at least one simulated object. French, however, in '565 teaches physical object data including mass and dimensions. The physical object data of '565 include mass (Col. 16, Line 62 to Col. 17, Line 8). The player wears beacons or reflectors on his or her body that allow the system to capture movement information (Col. 36, Lines 18 to 50), and the system reports the player's displacement, velocity, and acceleration in absolute terms (Col. 12, Lines 4 to 17), so the data inherently contain the player's physical dimensions. It would be obvious to one of ordinary skill in the art to apply the physical object data of '565 to the combination of '895, '446, and '554. The object data of '565 can be applied to track and field events (Col. 1, Lines 35 to 40; Col. 9, Lines 22 to 24), like the hammer-throwing event of '446. '565 realistically depicts the game event on a display (Col. 8, Lines 23 to 34 and 43 to 52), like '446 (Figs. 5A-D). The advantage of this combination would be to make the depiction of the athletes as realistic as possible by using physical data acquired from actual athletes' performances.

9. As to Claim 4: '565 is capable of providing a virtual reality experience simulating forces encountered by the athlete in real playing conditions (Col. 36, Lines 52 to 58). These forces can include resistance from treading through snow, mud, or waist-deep

water encountered in outdoor environments (Col. 37, Lines 45 to 49). This information can be used for simulated gaming rule data that interact with the physical object data of the player.

10. As to Claim 5: The gaming machine of '446 depicts a three-dimensional simulation of a hammer-throwing event (Figs. 5A-D).

11. As to Claim 6: The processor of '565 is adapted to mathematically model physical object data and the simulation rule data, and then enable a realistic depiction on the display (Col. 8, Lines 23 to 52).

12. As to Claim 8: Luciano in '895 teaches a gaming machine (Fig. 1A) with means for accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). Oshima in '446 teaches accessing physical object data, simulation rule data, and producing a realistic depiction of gaming activity on a display. '446 has physical object data (coordinates, Figs. 3A-C and 4A-H). '446 also has simulation rule data (calculating means, result information setting means, decision means, graphic command issuing means, variable setting means, linear and angular displacement acquiring means, and polygon information managing means, Fig. 2). French in '565 teaches mathematically modeling physical object data and the simulation rule data, and then realistically depicting game actions on a display (Col. 8, Lines 23 to 52). '895 teaches evaluating if game actions meet winning conditions and awarding a payoff if game actions meet the winning conditions (334, 336, 337, and 338, Fig. 3). '554 teaches simulation rule data including performance tendencies of a physical object, namely performance tendencies of a batter and a pitcher based on past performance. Step 418 of Fig. 7 calculates an

altitude error of a hit ball in a baseball game based on the player's skill (Col. 16, Lines 7 to 21). Step 332 of Fig. 6c calculates hit/miss values based in part on the quality of the pitch and the skill of the batter (Col. 15, Lines 47 to 58). '895 randomly selects a game outcome from a plurality of game outcomes, the plurality of game outcomes including a winning condition (Steps 326, 328, 332, game of chance displayed 334, game of chance evaluated using standard paytables 336, and 337, Fig. 3, Col. 10, especially lines 1 to 24; games of chance can be poker or blackjack, which are known to have winning outcomes drawn from a deck of cards (finite set of indicia), Col. 6, Lines 51 to 64). '895 has interaction guidelines associated with a winning condition (in coordination/dexterity game, phaser is fired and evaluated if successful or not, Steps 316, 318a, 322, and 324, Fig. 3; alternatively, for '895's game of chance, a paytable for the game of chance is chosen based on the player's level of skill in the coordination/dexterity game, the potential rewards are greater, but the odds are the same, Steps 326, 328, 332, game of chance displayed 334, game of chance evaluated using standard paytables 336, and 337, Fig. 3, Col. 10, especially lines 1 to 24; games of chance can be poker or blackjack, which are known to have winning outcomes drawn from a deck of cards (finite set of indicia), Col. 6, Lines 51 to 64).

13. As to Claim 9: '565 accesses motion capture data and uses the data while displaying the visual depiction (Col. 8, Lines 23 to 52).

14. As to Claim 10: '565 mathematically models games actions, namely sports actions (Col. 1, Lines 35 to 43).

15. As to Claim 11: '565 applies simulation rule data to physical object data to result in a mathematical model of real-world physical object interactions (Col. 36, Lines 52 to 58; Col. 37, Lines 45 to 48; Col. 8, Lines 23 to 52).

16. As to Claim 12: '565 defines physical object data by mass (Col. 16, Line 62 to Col. 17, Line 8; Col. 12, Lines 4 to 17; Col. 36, Lines 18 to 47).

17. As to Claim 13: '565 mathematically represents real-world forces (Col. 36, Lines 52 to 58; Col. 37, Lines 45 to 49).

18. As to Claim 14: In '565 the system 560 of Fig. 27 can display moguls, tree branches, other skiers, etc. to realistically simulate a ski slope. The apparent speed of movement is varied as the subject moves to avoid obstacles (Col. 38, Lines 33 to 39).

19. As to Claim 16: '565 simultaneously simulates and displays an interaction of physical objects using simulation rule data to determine an interaction of simulated physical objects using physical object data (Col. 8, Lines 23 to 52; Col. 36, Lines 52 to 58; Col. 37, Lines 45 to 48).

20. As to Claim 17: '895 teaches comparing the game outcome to a set of predefined outcomes and awarding a payoff if the game outcomes meet the winning criteria (334, 336, 337, and 338, Fig. 3).

21. As to Claim 18: '565 simultaneously simulates and displays physical interactions (Col. 8, Lines 23 to 52). '565 teaches a physics engine in the form of software (Col. 8, Lines 23 to 52; Col. 12, Lines 4 to 17; Col. 36, Lines 52 to 58).

22. As to Claim 19: '895 teaches a game of chance that can be roulette (Col. 10, Lines 42 to 46).

23. As to Claim 20: '446 simultaneously simulates and displays a sports game (Figs. 5A-D).

24. As to Claim 21: '565 can be used to model physical interactions in basketball (Col. 26, Lines 50 to 51).

25. As to Claim 22: Luciano in '895 teaches a gaming machine (Fig. 1A) with means for accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). '565 teaches a physics engine in the form of software (Col. 8, Lines 23 to 52; Col. 12, Lines 4 to 17; Col. 36, Lines 52 to 58); the physics engine of '565 uses physical object data and simulation rule data to numerically simulate an interaction of physical objects. '446 renders a visual display of a simulated interaction using two-dimensional representation of three-dimensional forms (Figs. 5A-D). '895 teaches evaluating if an outcome of an interaction meets winning criteria and awarding a payoff if the outcome meets the winning criteria (334, 336, 337, and 338, Fig. 3). '554 teaches simulation rule data including performance tendencies of a physical object, namely performance tendencies of a batter and a pitcher based on past performance. Step 418 of Fig. 7 calculates an altitude error of a hit ball in a baseball game based on the player's skill (Col. 16, Lines 7 to 21). Step 332 of Fig. 6c calculates hit/miss values based in part on the quality of the pitch and the skill of the batter (Col. 15, Lines 47 to 58). The interaction of the physical objects in '554 includes the performance tendencies as the altitude error of the batted ball is determined in part from the batters ability (Step 418, Fig. 7).

26. As to Claim 23: The golf embodiment of '895 has paytables with predetermined payout ratios depending on which section of the golf course the ball lands on (Col. 8, Lines 32 to 39).

27. Claims 1, 8, 15, 22, and 24 to 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciano, et al. (U.S. patent 6,050,895 A) in view of Bourg ("Physics for Game Developers," by David M. Bourg, © 2002 O'Reilly and Associates, Inc., hereafter referred to as "Physics") and Power Drive Rally ("Power Drive Rally" video game for the Atari Jaguar ™ game system, © 1994 Atari Corporation, manual downloaded Oct. 26th, 2006 from www.replacementdocs.com, hereafter referred to as "Power Drive").

28. As to Claim 1: '895 discloses all of the elements of Claim 1, but lacks specificity as to. '895 teaches a gaming machine (Abst., Fig. 1A). '895 has means for receiving a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A), system memory (memory 126, Fig. 1A, Col. 11, Lines 34 to 38; controller board or PC inherently has memory, Col. 3, Lines 43 to 47), and a display (Fig. 1A). '895 has a central processor (central controller 512, Fig. 5; Col. 11, Lines 42 to 46) and means for awarding a payoff based on an outcome of the gaming activity (3, Fig. 3; Col. 10, Line 67 to Col. 11, Line 1). Physics, however, teaches physical object data (Ch. 2, among others, Kinematics, Pages 27 to 56, velocity, acceleration, etc.; Ch. 4, Kinetics, mass, force, etc., Pages 69 to 86) and simulation rule data (Ch. 5, Collisions, how bodies interact with each other, Pages 87 to 100), and processing the physical object data and

simulation rule data to produce a realistic depiction of gaming activity on the display (Ch. 16, Multiple Bodies in 3D, Pages 249 to 267; especially Fig. 16-1, Page 250, Impact Simulation). It would be obvious to one of ordinary skill in the art to apply the physical object data, simulation rule data, and processing of physical object data and simulation rule data of Physics to the gaming system of '895. One of the cited possible manual dexterity games of '895 is a driving simulation game in which the player must avoid an obstacle (Col. 5, Lines 18 to 22). Fig. 16-1 of Physics show a driving simulation game in which a car hits an obstacle and the resulting collision is shown. The combination would yield a system memory containing physical object data and simulation rule data and a central processor for processing the physical object data and the simulation rule data to produce a realistic depiction of gaming activity on the display. The advantage of this combination would be to use physical laws to realistically depict the objects on the screen and their interactions. Power Drive, however, teaches simulation rule data including performance tendencies of the physical object. Page 8 outlines how the engine, suspension, tires, brakes, and lights can sustain damage throughout the course of the race, affecting the car's performance. The examiner notes that the performance tendencies claimed by the applicants do not necessarily affect the game objects' interactions with each other. It would be obvious to one of ordinary skill in the art to apply the performance tendencies of Power Drive to the combination of '895 and Physics. A damaged engine would cause a car to not accelerate as fast; poor brakes would cause a car to decelerate slowly or not at all—these could be simulated by the physics rules outlined in Ch. 4, Kinematics, of Physics. Body damage caused by

collisions could be simulated by the physics rules in Ch. 5, Collisions, of Physics. This is also suggested by '895, which mentions a driving simulation game in which a player must avoid obstacles (Col. 5, Lines 18 to 22). This combination would yield a system memory containing physical object data and simulation rule data, wherein the simulation rule data includes performance tendencies of the physical object. The advantage of this combination would be to realistically simulate the various types of damage that might occur in a racing game.

29. As to Claim 8: '895 teaches a method of operating a gaming machine (Abst.). '895 teaches accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). Physics teaches accessing physical object data and simulation rule data (Ch. 2, among others, Kinematics, Pages 27 to 56, velocity, acceleration, etc., Ch. 4, Kinetics, mass, force, etc., Pages 69 to 86; Ch. 5, Collisions, how bodies interact with each other, Pages 87 to 100). Physics teaches mathematically modeling game actions of one or more physical objects within a simulation world using the physical object data and the simulation rule data (Ch. 5, Collisions, how bodies interact with each other, Pages 87 to 100; Ch. 16, Multiple Bodies in 3D, Pages 249 to 267, especially Fig. 16-1, Page 250, Impact Simulation). Power Drive teaches simulation rule data including performance tendencies of a physical object, namely a car in a racing game (Page 8 outlines how the engine, suspension, tires, brakes, and lights can sustain damage throughout the course of the race, affecting the car's performance). '895 displays a visual depiction of the game interactions (Fig. 1A, Col. 5, Lines 18 to 22). '895

determines if the game actions meet winning conditions and awards a payoff if the game actions meet winning conditions (3, Fig. 3; Col. 10, Line 67 to Col. 11, Line 1).

30. As to Claim 15: '895 teaches a method of operating a gaming machine (Abst.), including accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). '895 simultaneously simulates and displays in real time an interaction of simulated physical objects (Col. 5, Lines 1 to 21, real-time display inherently necessary in game of manual dexterity to avoid lags between input and display). Physics teaches the display of interactions of physical objects in three dimensions (Ch. 16, Multiple Bodies in 3D, Pages 249 to 267; especially Fig. 16-1, Page 250, Impact Simulation). '895 determines an outcome of the interaction and awards a payoff if the outcome meets winning criteria (3, Fig. 3; Col. 10, Line 67 to Col. 11, Line 1). Regarding the new limitation of the interaction of simulated physical objects including a plurality of outcomes having a winning condition, '895 teaches trigger events related to normal occurrences during the play of the game (the trigger event may comprise the occurrence of two or more events, such as receiving a particular type of input from a player at a time that a display is being controlled to display a particular type of image, for example, a user firing laser at a spaceship when it is in a predefined portion of the display screen, Col. 6, Lines 1 to 17; also, the triggering event may be an event unrelated to player input, such as the passage of a predetermined amount of time or a ball landing on a secret, invisible, or moving region or symbol, Col. 6, Lines 17 to 21; these events are determined randomly, Col. 6, Lines 1 to 21). '895 awards a payoff if the outcome is a winning condition (Fig. 3).

31. As to Claim 22: '895 teaches a method of operating a gaming machine (Abst.) comprising accepting a wager (coin acceptor 106, bill validator 108, and card reader 112, Fig. 1A). Physics teaches a physics engine (Page xi, Preface). Physics teaches using physical object data and simulation rule data to numerically simulate an interaction of physical objects, thereby causing simulated interaction (Ch. 16, Multiple Bodies in 3D, Pages 249 to 267; especially Fig. 16-1, Page 250, Impact Simulation). Power Drive teaches the interaction of physical objects including performance tendencies (driver must avoid colliding with snow banks and obstacles, Pages 6 and 7; damage resulting from collisions, Page 8, statement "...the only thing tougher than a rally car is a rally track..." implying collisions with track obstacles). Physics teaches rendering a visual display of the simulated interaction using a two-dimensional representation of three-dimensional forms (Ch. 5, Collisions, how bodies interact with each other, Pages 87 to 100; Ch. 16, Multiple Bodies in 3D, Pages 249 to 267, especially Fig. 16-1, Page 250, Impact Simulation). '895 determines an outcome of the interaction and awards a payoff if the outcome meets winning criteria (3, Fig. 3; Col. 10, Line 67 to Col. 11, Line 1). Regarding the new limitation of the interaction of simulated physical objects including a plurality of outcomes having a winning condition, '895 teaches trigger events related to normal occurrences during the play of the game (the trigger event may comprise the occurrence of two or more events, such as receiving a particular type of input from a player at a time that a display is being controlled to display a particular type of image, for example, a user firing laser at a spaceship when it is in a predefined portion of the display screen, Col. 6, Lines 1 to 17; also, the triggering

event may be an event unrelated to player input, such as the passage of a predetermined amount of time or a ball landing on a secret, invisible, or moving region or symbol, Col. 6, Lines 17 to 21; these events are determined randomly, Col. 6, Lines 1 to 21). '895 awards a payoff if the outcome is a winning condition (Fig. 3).

32. As to Claim 24: It is possible for the simulation rule data of Power Drive to remain constant over time if the player avoids reckless driving (Page 8).

33. As to Claim 25: It is possible for the simulation rule data of Power Drive to change over time if the player accumulates damage over the course of the game (Page 8).

34. As to Claim 26: The simulation rule data of Power Drive can affect the outcome of the gaming activity (car's condition affecting performance, Page 8).

35. As to Claim 27: Power Drive modifies the simulation rule data of the physical object based on the game actions (reckless driving resulting in accumulated damage affecting car's performance, Page 8).

36. As to Claim 28: The simulation rule data of Power Drive can affect whether game actions meet winning conditions (reckless driving resulting in accumulated damage affecting car's performance, Page 8).

37. As to Claim 29: The simulation rule data of Power Drive affect the outcome of the interaction (reckless driving resulting in accumulated damage affecting car's performance, Page 8).

Response to Arguments

Applicant's arguments filed 12-28-2006 have been fully considered but they are not persuasive. The previous 112 rejections are withdrawn. The examiner' previous arguments from 11-30-2005 and 6-7-2006 are incorporated by reference. From the applicant's specification, it appears that the applicants are trying to claim a game in which a simulation of a sporting or gaming event, without user input, is used essentially as a random number generator, in which the game is simulated with three-dimensional graphics according to the rules of a game. This, however, is not clear from a reading of the claims. Travis, et al. in 5,380,007 A teach a video lottery gaming device in which balls interact according to simulation rule data to simulate on a video screen the air-driven hoppers used by lotteries to select winning numbers (Abs., Fig. 1). Fentz, et al. (previously cited in 5,775,993 A teach a roulette ball interacting with a roulette wheel according to simulation rule data (Abst., Fig. 10). Dettor in 5,564,701 A teaches using random number generation to generate the results of a simulated horse race (Abst.). Siekierski, et al. in 4,527,798 A teach using a random number generator to select a random previously recorded horse race (Col. 6, Col. 13, Line 60 to Col. 15, Line 10). The examiner believes it would be obvious to display any of these games using three-dimensional simulation rule data, since most video games at the time of invention were two-dimensional representations of simulated three-dimensional games or virtual worlds. The examiner finds the claims to be very broadly written, not even pertaining to a particular type of game. This is underscored by the fact that the examiner rejected

Claims 1, 8, 15, 22, and 24 to 29 with a car racing game and Claims 1, 2, 5, 7, and 15 with a simulated sports game. Both types of games involve object interaction and simulation rule data. The simulated sports game of Oshima involved the hammer thrower interacting with the thrown hammer and the car racing game of Power Drive Rally involves simulated cars that can collide with each other, accumulating damage that impedes the performance of the car throughout the race (the previously claimed “performance tendencies”). This breadth is also underscored by the fact that the two types of games specified in the application, horse racing and roulette otherwise have nothing in common. Physical object data are claimed but not specified in the claims. Are the data mass, speed, acceleration, size, gravity, etc.? Simulation rule data are claimed but are not specified in the claims. Are the data collision detections, object interactions such as gravitational attraction, etc.? No physical quantities are cited, no equations are cited, and the type of object interaction (collision, gravitational attraction, magnetic repulsion, one object launching another like the hammer thrower in Oshima) is nowhere cited in the claims. The claims do not pertain to a particular type of game. The examiner finds nothing in the claim language to preclude the cited references being used to anticipate the claims. The applicants state regarding Luciano on Page 8 of the Remarks: “The dexterity/skill games have outcomes that are determined in relation to a player providing a particular input or inputs. (Col. 5, ll 1-5). For example, a golf game allows a player to provide an input to simulate a golf shot and thus determine the outcome of the game based on the ending of the golf shot. (Col. 8, ll 4-20).” This underscores the examiner’s very point that Luciano was analogous art to Oshima and

that combination was proper. The hammer throwing game of Oshima is an analogous game of skill in which the winning outcome is determined based on player input ('446, Col. 2, Lines 15 to 50): "If the direction in which the object flies in the game space is determined based on only the posture of the contestant displayed in the game space, however, the game player finds it difficult to decide the exact time for the contestant in the game space to hurl the object. This is because the game player has to decide the exact time for the contestant in the game space to hurl the object based on only contestant images that are successively displayed on the display screen. ¶ In a hammer throw video game, a predictive vector represented by the image of arms of the contestant in the game space differs from a predictive vector represented by the image of the hammer that is being turned by the contestant. When a moving image of the contestant who is throwing the hammer is generated using a motion capture process, inertia is visually expressed in the same manner as actual inertia. Therefore, the image of the hammer is displayed behind the image of the arms of the contestant which is turning with respect to the direction in which the contestant is turning. The game player thus has difficulty in deciding the time at which the contestant in the game space should release the hammer. ¶ In each of object-throwing contests such as hammer throw and discus throw in which the object is hurled after having turned a plurality of times, there is a principal count of turns which the object should make before it is hurled. In video games of those object-throwing contests, it is necessary to declare a throw failure if the object is not hurled when the count of its turns reaches the principal count of turns. Declaring a throw failure in such a case makes the object-throwing video game

interesting and fun to play. However, since the game player needs to count how many times the object should turn before it is hurled while seeing the image of the object turn in the game space, the game player tends to induce a count error and disturb their concentration on the video game as it proceeds, possibly adversely affecting the results of the video game." The applicants also state on Page 9 of the remarks that a winning outcome is not in player control, citing the example of a playing card from a shuffled deck; this, however, is not clear from a reading of the claims. The applicants cite a card game as one possible embodiment of their invention on Page 13 of their specification. The examiner points the applicants to Scarne's chapter on blackjack outlining blackjack strategy (Pages 284 to 288). Even in games in which cards are randomly dealt from a deck, the winning hand is based on the player's input. In the case of blackjack, the player has to obtain a hand higher than the dealers hand without exceeding 21; which is determined by if the player properly holds or discards cards. The winning hand is not a particular combination of cards. The examiner also points the applicants to Scarne's chapter on blackjack, strategy on Pages 49 to 55. Again, the object of poker is to have the highest hand at the end of a round of play, based on whether the player properly held or discarded cards. The outcome is not a particular hand, but the highest hand at the end of play, which is only partially determined by the order in which indicia are dealt from the set of indicia. The examiner respectfully disagrees with the applicants as to the claims' condition for allowance.

Citation of Pertinent Prior Art

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Travis, et al. in 5,380,007 A teach a video lottery gaming device in which balls interact according to simulation rule data to simulate on a video screen the air-driven hoppers used by lotteries to select winning numbers (Abs., Fig. 1). Fentz, et al. (previously cited in 5,775,993 A teach a roulette ball interacting with a roulette wheel according to simulation rule data (Abst., Fig. 10). Dettor in 5,564,701 A teaches using random number generation to generate the results of a simulated horse race (Abst.). Siekierski, et al. in 4,527,798 A teach using a random number generator to select a random previously recorded horse race (Col. 6, Col. 13, Line 60 to Col. 15, Line 10). "Scarne's Encyclopedia of Card Games," by John Scarne, © 1973 HarperCollins, chapters on poker (Pages 6 to 55) and blackjack (Pages 278 to 292), show how player strategy is used even in games where indicia are randomly dealt from finite sets of indicia. In these times of games, even video games with simulation rule data will require some strategy on the part of the players.

Conclusion

39. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

40. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on Mon. to Fri., 8:00 A.M. to 4:30 P.M.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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